



PN-IV-INO-PED-2024-1 Experimental Demonstration Project – PED;
Program 5.7- Partnership for Innovation; Subprogram 5.7.1-Partnerships for Competitiveness

Coordinator: The National Research and Development Institute for Textiles and Leather, Bucharest, Romania

Partner: EPSICOM SRL, Craiova, Romania



THE TECHNOLOGIC AND BUSINESS INCUBATOR ITA TEXCONF

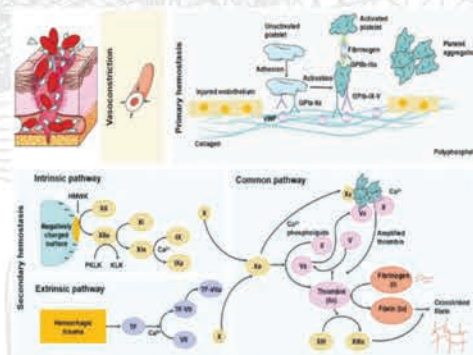
ITA TEXCONF is an entity in the infrastructure of innovation and technological transfer without legal personality, established within INCDTP based on HG 406/2003, accredited for the textile – clothing field and re-accredited in 2020, Certificate no. 118/2020, issued by the Ministry of Education and Research



Project title: HEMOSTATIC AUTONOMOUS SYSTEM BASED ON DIGITAL SOLUTIONS

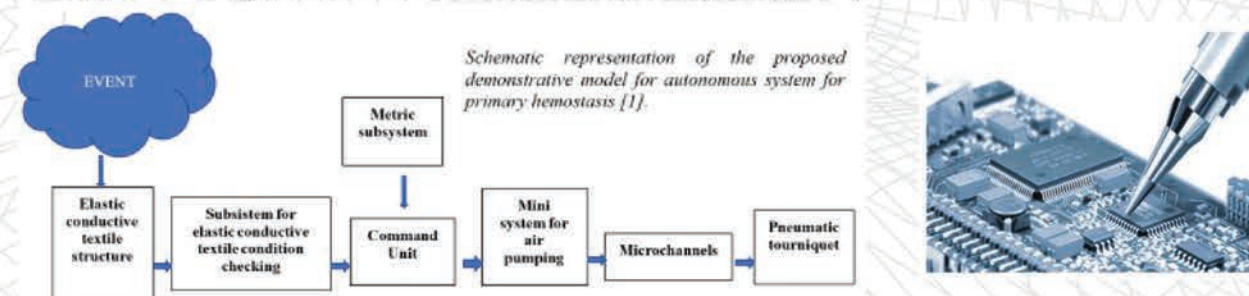
ACRONYM: M'HASS, **Duration:** 2025-2026

Many limb injuries, including segment or limb loss, happen within military conflicts as a consequence of using improvised explosive devices. In addition, many accidents at work or in traffic crashes are related to limb injuries with hemorrhagic aspects. In military operations, 12% of all injuries and wounds are associated with significant vascular lesions requiring treatment. Of the vascular lesions, 80% occur in the vessels of the limbs, 10% in the cervical region vessels and 10% in those of the thorax and abdomen, despite the use of body armour.



Project goal: conception and achievement of an innovative demonstrative model of an autonomous system for primary haemostasis that will ensure that bleeding is stopped without human intervention.

General objective: The development of an innovative solution for saving lives in emergencies (e.g., war, interventions of the police, army, etc.) without human intervention.



Specific objectives: to explore and fundament the digital solutions for hemostatic autonomous system development; to computationally design the hemostatic autonomous components; to develop the M'HASS demonstrative model (DM); to evaluate the functionality of the developed DM according to the requirements of the usage field; to optimize the developed technological solution; to maximise the expected outcomes and impact through communication and dissemination of the scientific knowledge generated by the research action at national and international level.

Results:

CAD design and FEM simulation of the phenomena associated with the detection of the bleeding wound and the triggering of the system to stop the bleeding process; conductive elastic textiles; control units; electrical and pneumatic components of the hemostasis system; test report, flyer and website dedicated to the project, publishable scientific papers (2), participation in scientific events (2), participation in events organized by stake holders, application for patent for invention.



Contact person (e-mail address): alexandra.ene@incdtp.ro



Insights from incubated company
SC Xtreme Equipment SRL

ITA TEXCONF is part of the National Network for Innovation and Technology Transfer ReNITT and acts for the sustainable economic and social development of the textile sector, by ensuring access to technological performance, developing the innovative environment, introducing quality systems and developing human resources.

The incubator is involved in specific actions of collaboration with all 5 existing clusters in the textile field, of which it is part as an active member: Romanian Textile Concept Cluster – RTxC, ASTRICO NE, Traditions Manufacture Future, Transilvania Textile & Fashion Cluster and Fashion Future Cluster.

Services:

- ❖ Services of sustaining textile-clothing SME competitiveness within the competitive background of the market economy;
- ❖ Services aiming at creating partnerships and financing drawing in within the projects;
- ❖ Services aiming at the product, equipment, innovation technology promoting in the field of textile-clothing, as part of scientific events (fairs, symposiums, conferences, etc.);
- ❖ Mediating contracts of technology transfer/manufacturing of products, experimental models, prototypes and specific applications for technical textile, personal protective equipment, invasive and non-invasive medical devices, special-purpose items, etc.;
- ❖ Mediating contracts in the field of investigating the textile material and product properties, within the RENAR accredited INCDTP laboratories.

16, Lucretiu Patrascanu street, postal code 030508, Bucharest, ROMANIA

Phone: (0040)-21-340.49.28; 340.42.00; Fax: (0040)-21-340.55.15

E-mail: office@incdtp.ro

General manager: Dr. eng. Alexandra Gabriela Ene